

Table 1
Physical Parameters

Relemac Aluminium/ Copper Conductor, PVC Insulated Unarmoured/ Armoured PVC Sheathed Three and Half Core Cables

Nom Area	No of Wires	Nom. Thick of Insl	Thick of I/Sheath	Dimension of Armour		Thickness of Outer Sheath				Overall Diameter			Approximate Mass of Cable/Km					
						Unarmd		Armd		Unarmd	Armd		Unarmd		Armd			
mm ²	Main/ Neut	Main/ Neut	Min	Wire	Strip	Nom	Min	Wire	Strip		mm	mm	mm	Al	Cu	Wire		Strip
								Min	Min	Al						Cu	Al	Cu
	No/ No	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg/Km		Kg/Km			
25	7/7	1.20/1.00	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	23	25	23	700	1250	1150	1700	900	1450
35	7/7	1.20/1.00	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	25	27	25	800	1550	1350	2050	1050	1800
50	7/7	1.40/1.20	0.30	2.00	4 x .8	2.20	1.56	1.56	1.56	28	30	29	1050	2050	1650	2600	1350	2350
70	19/7	1.40/1.20	0.40	2.00	4 x .8	2.20	1.56	1.56	1.56	32	34	32	1400	2800	2200	3600	1700	3100
95	19/7	1.60/1.40	0.40	2.00	4 x .8	2.20	1.56	1.72	1.56	36	39	36	1800	3700	2800	4750	2150	4050
120	19/19	1.60/1.40	0.50	2.00	4 x .8	2.40	1.72	1.88	1.72	39	42	40	2200	4700	3300	5750	2550	5050
150	19/19	1.80/1.40	0.50	2.00	4 x .8	2.40	1.72	1.88	1.88	43	46	44	2550	5550	3750	6700	3000	6000
185	37/19	2.00/1.60	0.50	2.50	4 x .8	2.40	1.72	2.04	2.04	47	51	48	3150	6900	4850	8650	3650	7400
240	37/19	2.20/1.60	0.60	2.50	4 x .8	3.00	2.20	2.36	2.20	53	57	53	4050	8950	5850	10800	4500	9400
300	37/19	2.40/1.80	0.60	3.15	4 x .8	3.20	2.36	2.52	2.36	58	63	58	4900	11100	7600	13800	5450	11650
400	61/37	2.60/2.00	0.70	3.15	4 x .8	3.40	2.52	2.68	2.68	64	69	64	6150	14000	9000	16850	6750	14600
500	61/37	2.80/2.20	0.70	4.00	4 x .8	3.80	2.84	3.00	2.84	76	83	76	7900	18050	12400	22500	8550	18700
630	91/37	3.40/2.40	0.70	4.00	4 x .8	4.00	3.00	3.00	3.00	84	91	84	9900	22950	14750	27800	10600	23700

Table 2
Electrical Parameters for Relemac Three and Half Core PVC Insulated & PVC Sheathed Cables

Nom Area of Cond	Maximum D. C. Resistance at 20 Deg C		Approx A. C. Resistance at 70 Deg C		Reactance	Capacitance	Nominal Current Rating						Short Circuit Rating for 1 sec	
	Alum	Copper	Alum	Copper	At 50 Hz	of the Cable	Aluminium			Copper			Al	Cu
							Ground	Duct	Air	Ground	Duct	Air		
mm ²	Ohm/Km	Ohm/Km	Ohm/Km	Ohm/Km	Ohm/Km	μF/Km	A	A	A	A	A	A	kA	
25	1.20	0.727	1.44	0.870	0.083	0.42	76	63	70	99	81	90	1.90	2.88
35	0.868	0.524	1.04	0.630	0.082	0.48	92	77	86	120	99	110	2.66	4.03
50	0.641	0.387	0.769	0.464	0.082	0.49	110	95	105	145	125	135	3.80	5.75
70	0.443	0.268	0.532	0.322	0.076	0.56	135	115	130	175	150	165	5.32	8.05
95	0.320	0.193	0.384	0.232	0.076	0.58	165	140	155	210	175	200	7.22	10.90
120	0.253	0.153	0.304	0.184	0.075	0.63	185	155	180	240	195	230	9.12	13.80
150	0.206	0.124	0.247	0.149	0.074	0.63	210	175	205	270	225	265	11.40	17.30
185	0.164	0.0991	0.197	0.119	0.074	0.64	235	200	240	300	255	305	14.10	21.30
240	0.125	0.0754	0.151	0.0912	0.073	0.67	275	235	280	345	295	355	18.20	27.30
300	0.100	0.0601	0.122	0.0733	0.073	0.68	295	305	260	315	385	335	400	34.50
400	0.0778	0.0470	0.0961	0.0580	0.072	0.70	335	290	375	425	360	435	30.40	46.00
500	0.0605	0.0366	0.0759	0.0459	0.072	0.70	370	320	425	470	390	520	38.00	57.50
630	0.0469	0.0283	0.0610	0.0368	0.072	0.70	405	350	480	555	470	675	47.90	72.50